AMENDMENTS

Applicants request that the Examiner enter the following amendments:

- 1. (Currently amended) A <u>centripetally-motivated</u> microfluidic platform comprising a plurality of microfluidics components fluidly connected by microchannels, wherein each of the microfluidic components and microchannels comprises an interior surface, where the combination of microfluidic components defines a manifold, where the manifold communicates to the ambient atmosphere through ports and vents and where each interior surface is coated with a conformal coating of parylene.
- 2. (Original) A method for producing a preassembled device of claim 1 through the use of vapor deposition of parylene.
- 3. (Original) The device of claim 1, where the parylene coating serves as an impermeable barrier between the fluid and the microfluidic manifold material, thereby, enhancing the performance of a biochemical assays.
- 4. (Original) The device of claim 1, where adhesive tape is used for the purposed of sealing and assembly.
- 5. (Original) The device of claim 1, where the parylene coating serves as an impermeable barrier between the fluid and the microfluidic manifold material, thereby, enhancing the performance of a PCR amplification assay.